

# COMPUTER SCIENCE FOR SCHOOL COUNSELORS

Careers in science, technology, engineering, and math (STEM) and computer science (CS) are shaping the world we live in and solve some of its biggest challenges. The Michigan Department of Education is expanding the computer science curriculum. We need Michigan's schools to encourage students to participate in these courses and gain this problem-solving mindset!

There are thousands of new jobs available in the field of Computer Science. [According to NCWIT.org](#), by 2029, there will be an estimated 3.6 million computing related jobs open in the United States. Many of these same jobs will be available in Michigan "[Hot 50 Jobs through 2028](#)."

## How to Increase Student Access to Computer Science Education and Careers

### Rediscover Computer Science

- Encourage students to incorporate a computer science course to develop problem-solving skills and computational thinking while exploring career options.
- Tip: As a counselor, try this "unplugged" activity to experience computational thinking first hand. ([Graph Paper Programming - Unplugged](#))

### Share that Computer Science is for Everyone

- Explain Computer Science isn't just for students who will pursue computing after high school. Computational thinking is fundamental to success in many fields and in life! Computer Science prepares students for quality jobs that can lead to greater equity and social justice for all.
- Tip: Share [Which Computing Pathway is Right for Me?](#) with students to present many interesting expressions of computing across disciplines and fields.

### Help Students see that Tech Jobs are Everywhere

- Direct students to viable tech job opportunities in your community, emphasizing that computing professionals don't only work in Silicon Valley.

## May 2019 Median Annual Wage:

### Computer and Information Technology Occupations

**\$88,240**

### All Occupations

**\$39,810**

[US Occupational Outlook Handbook](#)

- Tip: Explain that [computing supports modern innovation](#) in fields such as healthcare and digital arts, and that 50% of computing jobs are outside the tech sector and embedded in every industry.
- Tip: Check with your area chamber of commerce or county ISD/RESA to connect with local professionals in Computer Science/STEM careers.

### Introduce Students to the Technology Workforce

- Engage with local computing professionals to learn more about their work and how it contributes to its industry and the economy.
- Tip: Provide opportunities to engage students with diverse role models. Invite computing professionals or school alumni studying CS to the school career fair or to demonstrate new uses of technology.

### Related Resources

- [NCWIT resources for Counselors](#)
- [What can you do with a CS Degree?](#)
- Learn more about [professional trade careers in Michigan](#).

For more information visit [www.michigan.gov/mde-cs](http://www.michigan.gov/mde-cs).